TEAM CHARTER

Caffeine Coders | 11 June 2024

Fueling innovation, one cup at a time!

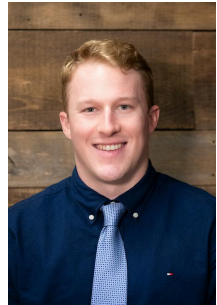Document Table of Contents:

Member Introductions & Roles/Responsibilities

Note that in addition to their lead roles, all team members will be involved with writing code, making technical and other decisions, and contributing to written engineering process deliverables.

Casey Rock

Roles/Responsibilities:
- Lead Architect
    - Will be responsible for defining the high-level approaches for each of the server, GUI, and database.
    - Defines software interfaces among all 3 components.
    - May write diagrams and/or code outlines (blank classes/functions with docstrings for example) to express high-level interfaces.
- Lead CM Engineer
    - Will be responsible for ensuring users can run our software regardless of their environment.
    - Produces technical documentation for how to use the software and any setup needed.
    - Defines what the software dependencies for the project are and where they should be sourced from.
- Programmer

My name is Casey Rock. I am a Computer Scientist currently leading efforts on an AI Program. My journey in the computer science world began at the University of Delaware, where I earned my Bachelor of Science in CS. During my time there, I co-founded a Cyber Security Education company, an initiative focused on teaching basic cybersecurity skills to students at the University Delaware. For the startup we developed a cloud based cyber range that allowed students to learn basic tools and techniques on simulated networks.

Calvin Nguyen

Roles/Responsibilities:
- Lead Tester
    - Will be responsible for ensuring the project meets the assignment requirements on the implementation side.
    - Implements and runs tests based on requirements defined by the SQA engineer.
    - Works with programmers to ensure all tests pass.
- Programmer
    - Will write code as needed for server, GUI, and/or database.

Hi my name is Calvin Nguyen. I am a Sr. Research Associate based in Southern California. Some of my more notable achievements have been: designing a low cost HIV detection assay with the Bill Melinda Gates foundation, bioinformatics work for an age quantification assay from blood, and scripting liquid handlers to automate workflows. Although I earned my bachelor's in Molecular Biology at UCLA, I've always had a passion for coding. Enrolling in a master's program for CS has been a goal of mine. I enjoy cycling (road) and the driving range (I only own a 7i).

Justin Cheung

Roles/Responsibilities:
- Project Manager
    - Will be responsible for assigning tasks and ensuring our team meets deadlines on all deliverables.
    - Performs final minor edits on deliverables and submits them by the appropriate deadlines.
- Lead SQA Engineer
    - Will be responsible for ensuring the project meets the assignment requirements on the non-implementation side.
    - Collects & communicates requirements for each deliverable.
    - Clarifies requirements with users (professors) as needed.
    - Defines unambiguously what tests need to be created to cover the requirements.
- Programmer
    - Will write code as needed for server, GUI, and/or database.

My name is Justin, and I'm a software engineer at GE HealthCare currently developing deep learning 3D image segmentation models in Python with TensorFlow. I've also been involved with software development for our C++ MRI image reconstruction software and our Python RESTful API-based internal compute test framework software. I did my undergraduate degree in electrical engineering with a focus in data science and systems at Rice University, and I'm currently doing a master's degree in computer science as part of the JHU EP program. Outside of work, I like to play music with friends.

Ting Wei Wang

Roles/Responsibilities:
- Lead Programmer
  - Guide the development team's technical strategy and ensure high code quality through reviews and best practices.
  - Collaborate with the lead architect to create detailed plans for the implementation of system architecture to ensure scalability, stability, and performance.
  - Track progress for timely software delivery.
- Lead Presenter
  - Organize and prepare clear, concise, and engaging presentations for stakeholders and team members.
  - Translate complex technical concepts into easily understandable terms for non-technical audiences.
  - Build and maintain strong relationships with stakeholders through regular, professional communication and feedback incorporation.

My name is Ting-Wei Wang. I am a postdoctoral researcher at National Yang-Ming Chiao Tung University, specializing in artificial intelligence in medical imaging. My work focuses on developing models for prognosis prediction using radiomics and tumor segmentation with deep learning. I also have expertise in systematic and quantitative meta-analysis, which enables me to provide higher-level analysis of AI models by evaluating clinical and technical factors for more precise model development. My unique interdisciplinary approach seamlessly integrates clinical knowledge with artificial intelligence, driving innovation and solving complex challenges through critical thinking. Over the past two years, I have authored nine first-author publications in SCI journals. I completed my MD-PhD physician-scientist program at National Yang-Ming Chiao Tung University and am currently pursuing a master of computer science EP program at Johns Hopkins University.

Team Communication Processes

1. **Primary Communication Channel:** Our team will primarily communicate using text chat in a dedicated Discord server. This platform allows quick and efficient communication, enabling free-flowing dialogue about work division, problem-solving approaches, and any other project-related questions or thoughts.
2. **Real-time Discussions:** If the team determines that real-time discussion is necessary and text chat becomes cumbersome, we will schedule ad hoc Discord calls. These calls will be held around noon Eastern Time on weekends to accommodate our team members' disparate time zones.

3. **Meeting Agenda and Minutes:** We will create a meeting agenda for any scheduled calls to ensure productive and focused discussions. After each call, we will maintain a record of the minutes, including key decisions made and action items assigned to team members.

Conflict Resolution Processes

1. **Majority Rule:** We will use majority rule to resolve conflicts and make decisions. When faced with multiple options, we will present the pros and cons of each option and engage in collective discussions to converge on a majority-supported approach.
2. **Open Communication:** We encourage open and respectful communication among team members. If conflicts arise, we will provide a safe space for individuals to express their concerns, ideas, and perspectives. Active listening and constructive feedback will be essential in resolving conflicts effectively.
3. **Mediation:** If a conflict cannot be resolved through majority rule or open communication, we will appoint a neutral team member or an external mediator to facilitate a resolution. The mediator will help the conflicting parties find common ground and reach a mutually agreeable solution.

Expectations and Accountability:

1. **Contributions:** We expect each team member to contribute to all project deliverables to the best of their ability. Suppose a team member is unable to contribute to a specific deliverable. In that case, they should provide reasonable advance notice (at least 4 days before the due date or as early as possible for last-minute emergencies).
2. **Accountability:** Team members are accountable for their assigned tasks and commitments. Suppose a team member consistently fails to meet their obligations or falls short of expectations. In that case, the team will address the issue through open communication and seek to understand the underlying reasons. The team may reassign tasks or escalate the matter to the project supervisor or course instructor if necessary.

Lessons Learned

We generated the team logo (black coffee cup with text, found at the top of this document) using Microsoft Copilot. This was quite effective for us, as it allowed us to spend minimal time generating a logo that all team members were happy with. This tool can be used by accessing this link and using the text prompt: https://copilot.microsoft.com/

Credits List

Individual members wrote their respective introductions.
All team members wrote and edited the remainder of the document together, and collaboratively discussed and determined the contents together.